Claims

What is claimed is:

1. A color filter manufacturing method for a plastic5 substrate, comprising the steps of:

providing a plastic substrate with an extrusion method, the substrate has multiple grooves with at least one surface containing photo-resists;

filling the primary colors of red R, green G, blue

10 B into the groove of the plastic substrate by
jetting to form the primary colors of R, G, B;

jetting the black photo-resist liquids by the inkjet printing method and forming a black photo-resist; and

- 15 covering a plane passivation layer on the top surface of the plastic substrate.
- The color filter manufacturing method according to claim 1, wherein the surface of the plastic
 substrate around the groove can be a smooth surface.
 - The color filter manufacturing method according to claim 1, wherein the surface of the plastic

substrate around the groove can be a rough surface.

- 4. The color filter manufacturing method according to claim 1, wherein the black photo-resist is formed on the surface of the plastic substrate apart from the space of R, G, B photo-resists.
- 5. The color filter manufacturing method according to claim 1, wherein the black photo-resist is formed on the pre-set groove of the bottom plastic substrate. The position of the groove and the groove of R. G. B. photo-resists are staggered.
- 15 6. The color filter manufacturing method according to claim 1, wherein the groove with R, G, and B photo-resists is with a plane surface.
- 7. The color filter manufacturing method according
 20 to claim 1, wherein the groove with R, G, and B photo-resists is with a lumpy surface.
 - 8. A color filter manufacturing method for a plastic substrate, comprising the steps of:

providing a plastic substrate with an extrusion method, the substrate has multiple grooves with at least one surface containing photo-resists;

filling the primary colors of red R, green G, blue B into the groove of the plastic substrate by jetting to form the primary colors of R, G, B; and

covering a plane passivation layer on the top surface of the plastic substrate.

- 10 9. The color filter manufacturing method according to claim 8, wherein the surface of the plastic substrate around the groove can be a smooth surface.
- 15 10. The color filter manufacturing method according to claim 8, wherein the surface of the plastic substrate around the groove can be a rough surface.

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